

**AF7 - Subgroup RF -
miniWorkshop on Cavity
Performance Frontier**

Report of Contributions

Contribution ID: 12

Type: **not specified**

SWFA demonstrators with integrated technologies for future large-scale machines

Tuesday, 16 February 2021 09:25 (15 minutes)

Presenter: SHAO, Jiahang (Argonne National Lab)

Session Classification: Structure wakefield accelerators

Contribution ID: 13

Type: **not specified**

Structure Wakefield Acceleration (SWFA) Development for an Energy Frontier Machine

Tuesday, 16 February 2021 09:10 (15 minutes)

Presenter: POWER, John (Argonne National Lab)

Session Classification: Structure wakefield accelerators

Contribution ID: 14

Type: **not specified**

Short-pulse wakefield structure R&D for high gradient and high efficiency acceleration in future large-scale machines

Tuesday, 16 February 2021 09:40 (15 minutes)

Presenter: SHAO, Jiahang (Argonne National Lab)

Session Classification: Structure wakefield accelerators

Contribution ID: 15

Type: **not specified**

A model of rf vacuum arcs

Tuesday, 16 February 2021 10:15 (15 minutes)

Presenter: NOREM, Jim (-)

Session Classification: Normal conducting high-gradient structures

Contribution ID: **16**

Type: **not specified**

High-Gradient Accelerators at THz Frequencies

Tuesday, 16 February 2021 10:30 (15 minutes)

Presenter: NANNI, Emilio (SLAC National Accelerator Laboratory)

Session Classification: Normal conducting high-gradient structures

Contribution ID: 17

Type: **not specified**

High-gradient RF structures for C3

Tuesday, 16 February 2021 10:45 (15 minutes)

Presenter: Prof. TANTAWI, Sami (SLAC National Accelerator Laboratory)

Session Classification: Normal conducting high-gradient structures

Contribution ID: **18**

Type: **not specified**

Key Directions for Research and Development of Superconducting Radiofrequency (SRF) Cavities

Tuesday, 16 February 2021 11:20 (15 minutes)

Presenter: BELOMESTNYKH, Sergey (Fermilab)

Session Classification: SRF general (key directions, theory, structures, improving cavity performance)

Contribution ID: **19**

Type: **not specified**

SRF for future accelerators

Presenter: RIMMER, Robert (JLab)

Session Classification: SRF general (key directions, theory, structures, improving cavity performance)

Contribution ID: 20

Type: **not specified**

Traveling wave SRF for ILC Energy Upgrade

Wednesday, 17 February 2021 09:05 (15 minutes)

Presenter: Prof. PADAMSEE, Hasan (Cornell University)

Session Classification: SRF general (new ideas, other)

Contribution ID: 21

Type: **not specified**

Normal and super conducting RF R&D for muon collider

Tuesday, 16 February 2021 11:50 (15 minutes)

Presenter: GRUDIEV, Alexej (CERN)

Session Classification: SRF general (key directions, theory, structures, improving cavity performance)

Contribution ID: 22

Type: **not specified**

Challenges and opportunities of SRF theory for particle accelerators

Tuesday, 16 February 2021 11:35 (15 minutes)

Presenter: GUREVICH, Alex (Old Dominion University)

Session Classification: SRF general (key directions, theory, structures, improving cavity performance)

Contribution ID: 23

Type: **not specified**

Development of High-efficiency and Cost-effective Forged Ingot Niobium Technology for Science Frontiers and Accelerator Applications

Wednesday, 17 February 2021 09:20 (15 minutes)

Presenters: MYNENI, Ganapati (JLab); Dr MYNENI, Ganapati

Session Classification: SRF general (new ideas, other)

Contribution ID: 24

Type: **not specified**

Plasma Processing for In-Situ Field Emission Mitigation of Superconducting Radiofrequency (SRF) Cryomodules

Tuesday, 16 February 2021 12:05 (15 minutes)

Presenter: MARTINELLO, Martina (Fermilab)

Session Classification: SRF general (key directions, theory, structures, improving cavity performance)

Contribution ID: 25

Type: **not specified**

Field Emission Suppression in High-Gradient SRF Cavity Systems

Tuesday, 16 February 2021 12:20 (15 minutes)

Presenters: GENG, Rongli (ORNL); GENG, Rongli (Thomas Jefferson National Accelerator Facility)

Session Classification: SRF general (key directions, theory, structures, improving cavity performance)

Contribution ID: 26

Type: **not specified**

Nb3Sn Superconducting Radiofrequency Cavities

Wednesday, 17 February 2021 09:55 (15 minutes)

Presenter: PORTER, Ryan (Cornell University)

Session Classification: Nb3Sn cavities

Contribution ID: 27

Type: **not specified**

Next Generation SRF accelerators based on Nb₃Sn

Presenter: RIMMER, Robert (JLab)

Session Classification: Nb₃Sn cavities

Contribution ID: 28

Type: **not specified**

An Impartial Perspective for Superconducting Nb₃Sn coated Copper RF Cavities for Future Linear Accelerators

Wednesday, 17 February 2021 10:10 (15 minutes)

Presenter: BARZI, Emanuela (Fermilab)

Session Classification: Nb₃Sn cavities

Contribution ID: 29

Type: **not specified**

Next-Generation Superconducting RF Technology based on Advanced Thin Film Technologies and Innovative Materials for Accelerator Enhanced Performance & Energy Reach

Wednesday, 17 February 2021 10:45 (15 minutes)

Presenter: VALENTE-FELICIANO, Anne-Marie (JLab)

Session Classification: Thin films, new materials

Contribution ID: **30**

Type: **not specified**

Innovative Materials and Surface Treatments for SRF applications

Wednesday, 17 February 2021 11:00 (15 minutes)

Presenter: CHECCHIN, Mattia (FNAL/TD)

Session Classification: Thin films, new materials

Contribution ID: 31

Type: **not specified**

The necessity of a basic materials research community for the accelerated development of SRF materials

Wednesday, 17 February 2021 11:15 (15 minutes)

Presenter: BALACHANDRAN, Shreyas (NATIONAL HIGH MAGNETIC FIELD LAB)

Session Classification: Thin films, new materials

Contribution ID: 32

Type: **not specified**

Development of MgB₂ Coated Superconducting Cavities

Wednesday, 17 February 2021 11:30 (15 minutes)

Presenter: Dr TAJIMA, Tsuyoshi (LANL)

Session Classification: Thin films, new materials